REMARKS

Applicants have amended Claim 1. No new matter is contained in the amendment. After entry of the previous and present amendments, Claims 1 – 5 and 14 are pending. The following Remarks are based on the Office Action mailed July 16, 1999, the Advisory Action mailed October 25, 1999, and the telephone interview with Examiner Alexander, on November 1, 1999. Based on the foregoing amendments and the following remarks, Applicants respectfully request consideration and allowance of the pending claims.

The Examiner stated that the chemically bonded bead structure in *Koyama et al.* is the same as the beads embedding the light reflective particles and the matrix in the present application. Applicants respectfully traverse this conclusion. In the amended Claim 1, however, the matrix and the beads are separately claimed elements. Furthermore, because reactive groups bind the particles to each other in *Koyama et al.,* they should no longer be considered as physically individual beads, but rather as a single molecular entity. An amendment to Claim 1 has now been made, that emphasizes that the presently claimed beads are independent of each other. The independent beads of the present application are not chemically bonded to each other, and, therefore, can be distinguished from the *Koyama et al.* invention.

The Examiner further stated that in *Terishima et al.* and EP 162 302, the entire composition, in each of the above-mentioned prior art references, could be considered a single layer, and thus all of the claimed components would be in that single layer. Applicants respectfully traverse this conclusion. With regard to *Terishima et al.* and EP 162 302, in those references the reagent and reflective particles are located in separate and adjacent layers. In contrast, in the present invention the elements are uniformly distributed within and throughout a single layer.

The Examiner further requested comparative data showing the non-obviousness of combining each component into a single layer. As an initial matter, a combination of the art does not suggest the invention, because polymer beads with embedded reflective particles are not taught or suggested therein. The amendment to Claim 1 now also states that the polymer beads and the reagent are homogeneously dispersed in the single reagent layer. This distinguishes the present invention from the prior art or a combination thereof, which teaches that the elements form superimposable layers, that are recognizably distinct from the one either above or below.

Additionally, in the comparative Example 1, starting on page 43, light reflective particles are not in the polymer beads, page 44, line 15. Notably, if the light reflective particles are directly used, and not embedded in polymer beads, it results in a significantly slower reaction rate

than with the present invention, page 47, lines 22 - 27. If the light reflective particles are not in the polymer bead as in the prior art, clogging occurs which also impairs the reaction rate, when compared to the improved drainability of the present invention. Therefore, the present invention provides surprising advantages which are not suggested by the prior art.

The foregoing is submitted as a preliminary amendment to the above-referenced continuation application. This Response places all claims in the present application in condition for allowance, and such action is courteously solicited. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact would facilitate an efficient examination and allowance of the application. The Commissioner is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16, or credit any overpayment, to Account No. 10-1215.

Respectfully submitted,

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